

Notice of Allowability

Application No.

10/613,305

Examiner

Dang T Nguyen

Applicant(s)

MOHR ET AL.

Art Unit

2824

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 23 August 2004.
2. ☒ The allowed claim(s) is/are 1 - 11, 13 - 51, and 53 -59.
3. ☒ The drawings filed on 2 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other Search history.


10/28/04

RICHARD ELMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Response to Amendment

1. This office action is in response to applicant's amendment received on 8/23/04. Claims 8, 51, 53, and 54 have been amended. Claims 12 and 52 have been canceled. New claims 55-59 have been added. Claims 1 - 11, 13 - 51, and 53 -59 are pending on this application.

Allowable Subject Matter

2. Claims 1 - 11, 13 - 51, and 53 -59 are allowed.
3. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claims 1, 20, and 33, the primary reason for indication of allowable subject matter is that the prior art fails to teach or suggest "redundancy driver select logic coupled to each of the redundancy comparison circuitry to activate a selected one of the redundancy comparison circuitry for comparing a portion of a memory address corresponding to a memory location with the programmed addresses of the respective programmable element blocks, the activation by the redundancy driver based on the memory block in which the memory location is located".

With regard to claim 8, the primary reason for indication of allowable subject matter is that the prior art fails to teach or suggest "redundancy driver select logic coupled to each redundancy driver of the bank of memory and having a plurality of NOR gates, each NOR gate having a different combination of a selection signal and its complement as input signals".

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With regard to claim 14, the primary reason for indication of allowable subject matter is that the prior art fails to teach or suggest “redundancy comparison selection circuit coupled to each of the redundancy comparison circuitry and having a control signal terminal to which at least one row address signal is applied, the redundancy comparison selection circuit generating an activation signal for activating one of the redundancy comparison circuitry in accordance with the row address signal”.

With regard to claims 27 and 40, the primary reason for indication of allowable subject matter is that the prior art fails to teach or suggest “redundancy driver select logic coupled to each redundancy driver of the bank of memory the redundancy driver selecting a redundancy driver to activate in response to receiving a selection signal indicative of the memory block in which a memory location corresponding to the memory address is located”.

With regard to claim 46, the primary reason for indication of allowable subject matter is that the prior art fails to teach or suggest “ blocking the memory address from comparison with the programmed addresses of the programmable element blocks for non-selected redundancy planes”.

With regard to claim 51, the primary reason for indication of allowable subject matter is that the prior art fails to teach or suggest “gating the column address for comparison with the programmed addresses of only the antifuse block identifying the memory locations of the memory block in which the memory location corresponding to the memory address is located; and blocking the column address from comparison with the programmed addresses of the antifuse blocks for the remaining redundancy planes”.

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4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Blodgett (Pub. No.: US 2003/0174568 A1) discloses predetermined data values are written to selected row and column addresses corresponding to memory cells.

Manning et al. (Patent No.: US 6,301,146 B1) discloses a compare circuit includes a plurality of Exclusive NOR (XNOR) gates, which have inputs connected to outputs of readers via lines and column address lines.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

6. Any inquiry concerning this communication from the examiner should be directed to Dang Nguyen, who can be reached by telephone at (571) 272-1955. Normal contact times are M-F, 8:00 AM - 4:30 PM.

Upon an unsuccessful attempt to contact the examiner, the examiner's supervisor, Richard Elms, may be reached at (571) 272-1869.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, whose telephone number is (703) 305-3900. The faxed phone number for organization where this application or proceeding is assigned is (703) 872-9306.

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Information regarding the Status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC@uspto.gov.

Dang Nguyen 10/22/2004